

5 Claims /PCT/FI2005/050093/Amended claims 19.1.2006
MAP5 Rec'd PCT/PTO 01 SEP 2006

1. Use of betuline as a filler in paper or board, wherein betuline is added to the pulp during the production of paper or board.
- 10 2. Use according to Claim 1, characterized in that betuline is used in combination with organic and/or inorganic fillers.
- 15 3. Method for producing paper or board, characterized in that an aqueous slurry is made of betuline, followed by the addition of said slurry to the pulp during the production of paper or board, and removal of water from the paper web, and then the production of paper or board is continued in a conventional manner.
- 20 4. Method for producing paper or board according to Claim 3, characterized in that betuline is slurried in water together with one or more excipients selected from the group consisting of dispersing agents, surface active agents, and stabilizers.
- 25 5. Method for producing paper or board according to Claim 3 or 4, characterized in that an aqueous slurry containing betuline is added to the pulp during the production of paper or board, after the addition of retention aids.
- 30 6. Method according to any of the Claims 3 – 5, characterized in that the aqueous slurry contains no more than 60 % by weight of betuline.
7. Method according to any of the Claims 3 – 6, characterized in that the aqueous slurry contains from 5 to 35 % by weight of fine betuline.
- 35 8. Method according to any of the Claims 3 – 7, characterized in that the aqueous slurry contains betuline having a mean particle size of no more than 30 µm.
9. Method according to any of the Claims 3 – 8, characterized in that the aqueous slurry contains betuline having a mean particle size between 0.3 and 10 µm.

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5 10. Method according to any of the Claims 3 – 9, characterized in that the aqueous slurry contains betuline having a mean particle size between 0.5 and 2.5 μm .

11. Paper or board, characterized in that it contains from 0.1 to 60 % by weight, preferably from 5 to 35 % by weight of betuline as the filler.

10 12. Paper or board according to Claim 11, characterized in that it contains betuline in combination with inorganic and/or organic fillers as the filler.